Primary Care Patients with Opioid Use Disorder Have a High Prevalence of Pain and Mental Health and Other Substance Use Disorders

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INTRODUCTION

In 2017, two million Americans had an opioid use disorder (OUD) and more than 47,000 died of an opioid overdose.¹ Addressing this epidemic requires treating OUD in primary care.^{2, 3} One potential challenge of treating OUD in primary care is comorbidity. Mental health and substance use disorders and chronic pain are common in patients with OUDs in specialty OUD treatment settings and on confidential surveys, but the prevalence of such comorbidity in primary care patients with OUD has not been confirmed. This brief report addresses that gap.

METHODS

This cross-sectional study used secondary data from a pragmatic trial that implemented Behavioral Health Integration in all 25 primary care sites of Kaiser Permanente Washington, a regional health system, between January 2015 and July 2018.⁴ All data were obtained from electronic health records and insurance claims for inpatient, outpatient, and emergency care. The sample included adult patients with primary care visits during the study period ($n = 433,110$) who had an active or remission OUD diagnosis or received buprenorphine for OUD within 1 year of their last primary care visit in that period. Identification of comorbid conditions was based on documented ICD-9/10 codes for pain, insomnia, mental health conditions, and other non-tobacco SUDs within 1 year of their last primary care visit during the study period. The overall prevalence of comorbid conditions was described, and then data were explored to describe overlap between conditions. Data were analyzed using SAS version 9.4 and the study was approved by Kaiser Permanente Washington's Institutional Review Board.

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RESULTS

A total of 5177 (1.2%) of primary care patients had an OUD (Table 1). Among those patients with OUD, 80% had a pain disorder, 21% insomnia, 70% mental health disorder(s), and 31% additional non-tobacco SUD(s). Among those with an

Table 1 Demographic and Clinical Characteristics of PC Patients with OUD ($n = 5177$)

	N	(%)
Gender		
Male	2264	(44)
Female	2913	(56)
Age		
18–29	966	(19)
30–39	985	(19)
40–49	801	(15)
50–59	902	(17)
60+	1523	(29)
Race		
Asian	105	(2)
Black	256	(5)
Hawaiian/Pacific Islander	57	(1)
Native American/Alaska Native	197	(4)
Unknown/other	315	(6)
White	4247	(82)
Ethnicity		
Hispanic/Latino	245	(5)
Insurance type		
Commercial	2486	(48)
Medicaid	521	(10)
Medicare	1514	(29)
Other	263	(5)
Private pay	393	(8)
Past-year months insured by Kaiser Permanente		
0–6	380	(7)
6–12	240	(5)
12+	4008	77
Past-year OUD		
OUD diagnosis (active)**	4521	(87)
OUD remission diagnosis**	981	(19)
Buprenorphine treatment for OUD**	1040	(20)
Common symptoms		
Pain	4158	(80)
Insomnia	1105	(21)
Past year self-reported substance use		
Tobacco use	2139	(41)
Unhealthy alcohol use	536	(15)
Past year mental health conditions*		
Depression	2798	(54)
Anxiety	2519	(47)
Serious mental illness	601	(12)
Past year non-tobacco SUD*		
Alcohol use disorder	698	(13)
Cannabis use disorder	464	(9)
Stimulant use disorder	458	(9)
Non-specific drug use disorder	872	(17)
Past year mental health conditions or additional SUD*		
Any mental health condition	3621	(70)
Any additional non-tobacco SUD diagnosis**	1593	(31)
Either MH condition and/or additional	3956	(76)

*Based on ICD-9 and/or ICD-10 codes; ** Patients could be in more than one group

Table 2 Prevalence of Pain, Insomnia, and Mental Health Conditions in Primary Care Patients with OUD: Comparison of Those with and Without an Additional Non-tobacco SUD (n = 5177)

	OUD only (n = 3584)		OUD plus ≥ 1 additional SUD (n = 1593)	
	%	(95% CI)	%	(95% CI)
Pain	82.4	(81.1–83.6)	75.6	(73.4–77.6)
Insomnia	18.7	(17.5–20.0)	27.2	(25.1–29.5)
Depression	50.4	(49.8–52.1)	62.2	(59.8–64.6)
Anxiety	43.1	(41.5–44.7)	61.2	(58.8–63.6)
Serious mental illness	8.7	(7.8–9.6)	18.2	(16.4–20.2)
Any mental health condition	65.9	(64.4–67.5)	79.0	(76.9–80.9)

additional SUD, 44% had alcohol use disorders, 29% cannabis use disorders, and 29% stimulant use disorders.

Pre-planned exploration of overlap between comorbid conditions suggested that patients with an additional non-tobacco SUD had a higher prevalence of mental health conditions (data not shown). Therefore, secondary analyses were stratified by the presence of another SUD. The 1593 patients with OUD who had at least one other SUD had a higher prevalence of mental health conditions and insomnia, while pain was more common in those without another SUD (Table 2).

DISCUSSION

Previous studies of comorbidity in patients with OUD have been limited to national survey samples⁵ or patients already engaged in OUD treatment in specialty settings. In this study, examining patients receiving routine primary care who had a documented OUD diagnosis or medication treatment for OUD within the past year, 80% had pain and 76% had a mental health condition and/or another SUD. Mental health comorbidity was especially high in those with at least one additional non-tobacco SUD.

Pain, mental health conditions, and substance use comorbidity have important implications for primary care OUD treatment² including initial medication selection and behavioral interventions. For example, patients with both OUD and alcohol use disorder may benefit from naltrexone, while those with OUD and pain may be more appropriately treated with buprenorphine. Pain, insomnia, mental health conditions, and SUDs can benefit from similar behavioral interventions, such as motivational interviewing, behavioral activation, or cognitive behavioral therapy, which could be used to simultaneously address multiple conditions.

This study should be interpreted in light of several limitations. The sample includes a single regional health system reflecting an insured population, and mental health and substance use conditions are likely under-recognized, despite Behavioral Health Integration including routine screening and assessment.⁴ Nevertheless, findings suggest that most primary care patients with OUD have pain, mental health, and/or additional substance use comorbidity that should be addressed during OUD treatment.

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